SERVICE MANUAL

T8.320 / T8.350 / T8.380 / T8.410 / T8.435 / T8.380 SmartTrax™ / T8.410 SmartTrax™ / T8.435 SmartTrax™ Continuously Variable Transmission (CVT)

Tractor

PIN ZGRE05001 and above; PIN ZHRE01013 and above

Part number 48123734
1st edition English
April 2017

NEW HOLLAND AGRICULTURE

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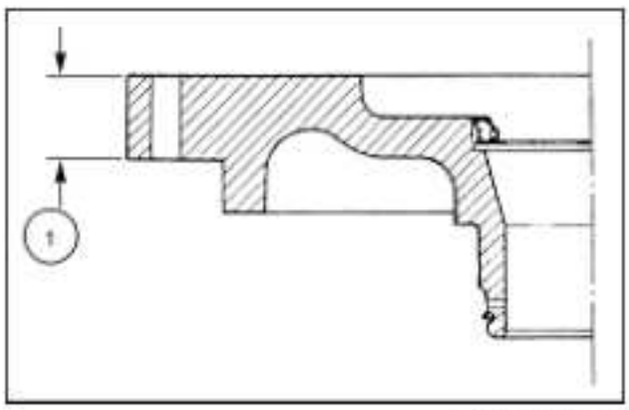
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Differential - Backlash - 114 mm (4.5 in) axle

T8.320 CVT TIER 2 [ZGRE05001 -]	APAC — LA — MEA
T8.350 CVT TIER 2 [ZGRE05001 -]	APAC — LA — MEA
T8.380 CVT TIER 2 [ZGRE05001 -]	APAC — LA — MEA
T8.410 CVT TIER 2 [ZGRE05001 -]	APAC — LA — MEA

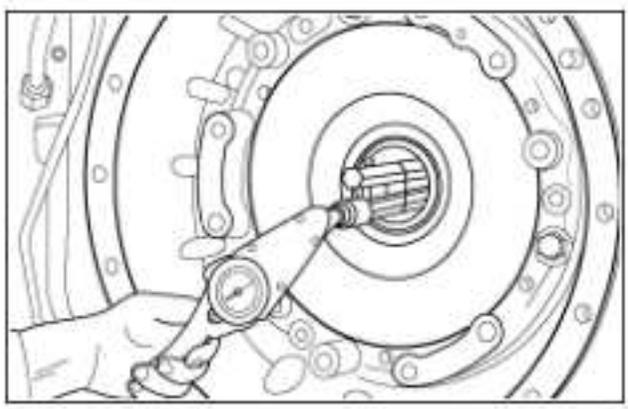
Prior operation:
Differential - Preload - 114 mm (4.5 in) axle (27.106)

1. Determine required shim pack thickness for the bearing retainers:
   A. Measure the thickness of the right hand bearing retainer at the machined surfaces **(1)**.
   B. Subtract this dimension from the average dimension obtained when measuring the retainer face to the rear frame.
   C. The difference between the two values is the thickness for the shim pack.
   D. Remove the bearing retainers, and split the shim pack equally between the two bearing retainers.

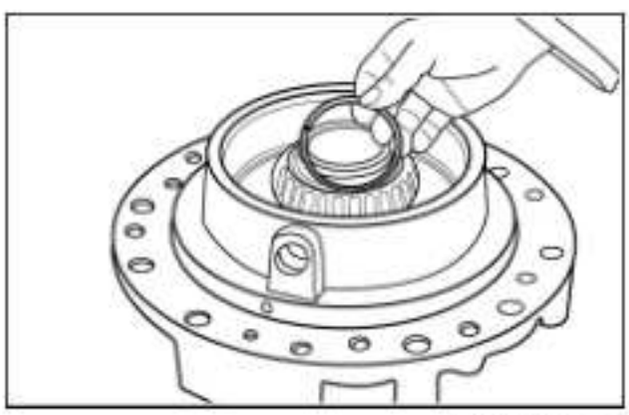


RCPH37CDI032AAA 1

2. Reinstall the bearing retainers as follows:
   A. After installing the new shim pack, install the bearing carriers.
   B. Tighten and then torque the bearing carrier bolts to **221 – 250 Nm** (**163 – 184 lb ft**) while rotating the differential.
   C. Rolling torque of the differential must be **4.5 – 9.0 Nm** (**40 – 80 lb in**) for new bearings and **2.0 – 4.0 Nm** (**20 – 35 lb in**) for old bearings (used for more than 200 hours). The desired setting is in the upper half of the ranges.
   D. To increase rolling torque, remove approximately **0.05 mm** (**0.002 in**) of shim material from the right-hand bearing retainer.
   E. To decrease rolling torque, add approximately **0.05 mm** (**0.002 in**) of shim material from the right-hand bearing retainer.


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3. Install the seal rings on both the left hand and right hand bearing retainer. The ends of the ring must lock together.


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Wiring harnesses - Electrical schematic sheet 03 - Power distribution - Battery (switched B+)

Type	Component	Connector / Link	Description
Relay	**K-032**		CAB POWER RELAY
Connector	X-001	**X-001**	CAB POWER STUD
Connector	X-239	**X-239**	FUSE BLOCK X-239

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14017 - Fuel level sensor voltage out of range low

NOTE: *When the cause of the error code has been rectified, clear the error code and test the system for normal operation.*

Cause:
Signal below **0.125 V** for 15 seconds.

Possible failure modes:

1. Faulty connector
2. Faulty fuel tank level sender
3. Faulty harness
4. Faulty instrument cluster

Solution:

1. Check the fuel tank level sender connector **X-066**, the instrument cluster connector **X-426** and the bulkhead cab connector **X-060**.

   Check if the connectors are damaged, if the pins are in the correct position and that the fit is tight.

   A. Loose or damaged connector **X-066** found.Tighten, repair or replace as required.

   B. Loose or damaged connector not found. Continue with step **2**.
2. Check for power at the fuel tank level sender connector.

   Use back probes to measure voltage between pin A of connector and ground; do not disconnect the fuel tank level sender connector. Turn the ignition switch to the on position.

   Expected reading is approximately **12 V**.

   A. **+12 V** not read. Check fuses #88. If fuses are good, locate and repair damage to harness as required. Return unit to field operation.

   B. **+12 V** not read. Continue to step **3**.
3. Check the fuel tank level sender signal voltage.

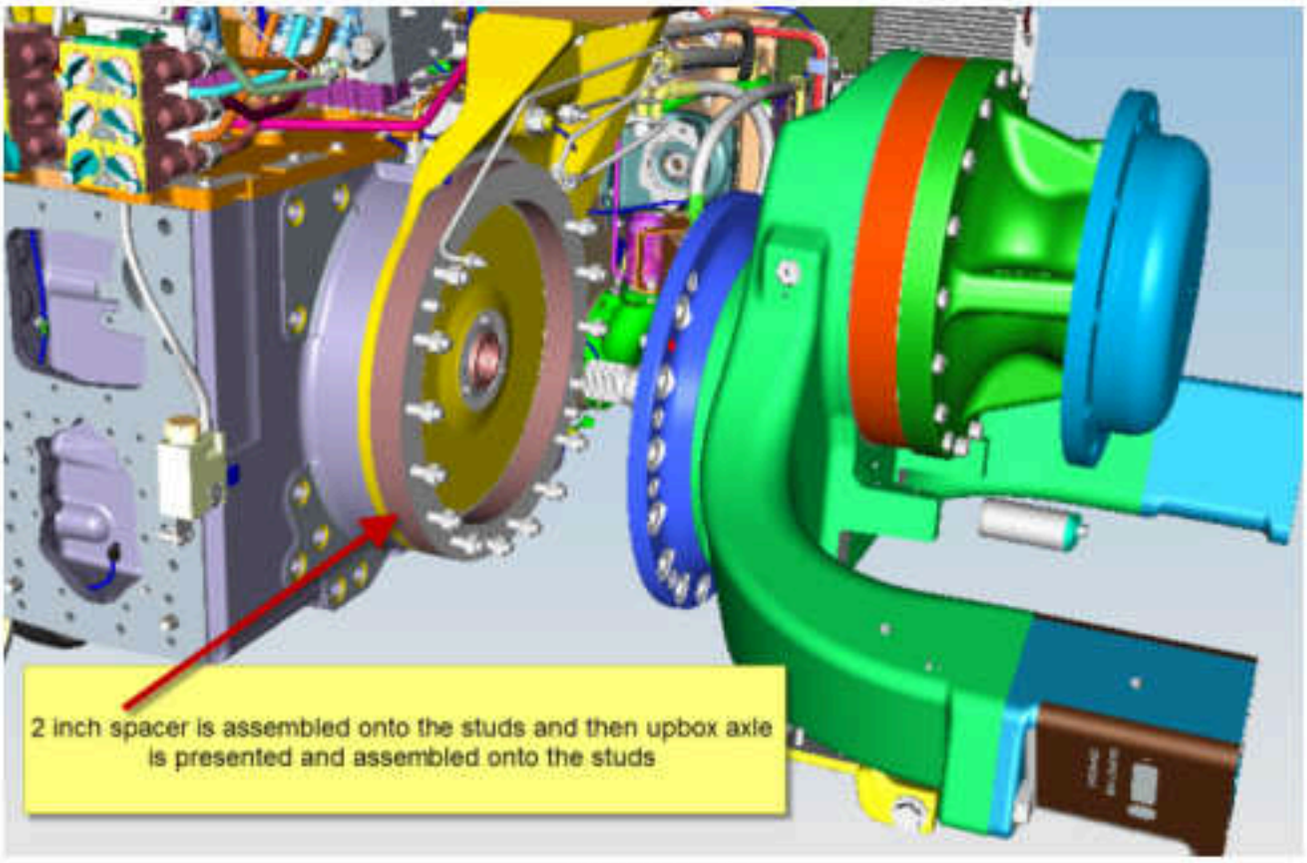
   Use back probes to measure voltage between pin B of connector **X-066** and ground; do not disconnect fuel tank level sender connector. Turn the ignition switch to the on position.

   Expected reading is approximately **0.25 V** for an empty tank and **4.75 V** for a full tank.

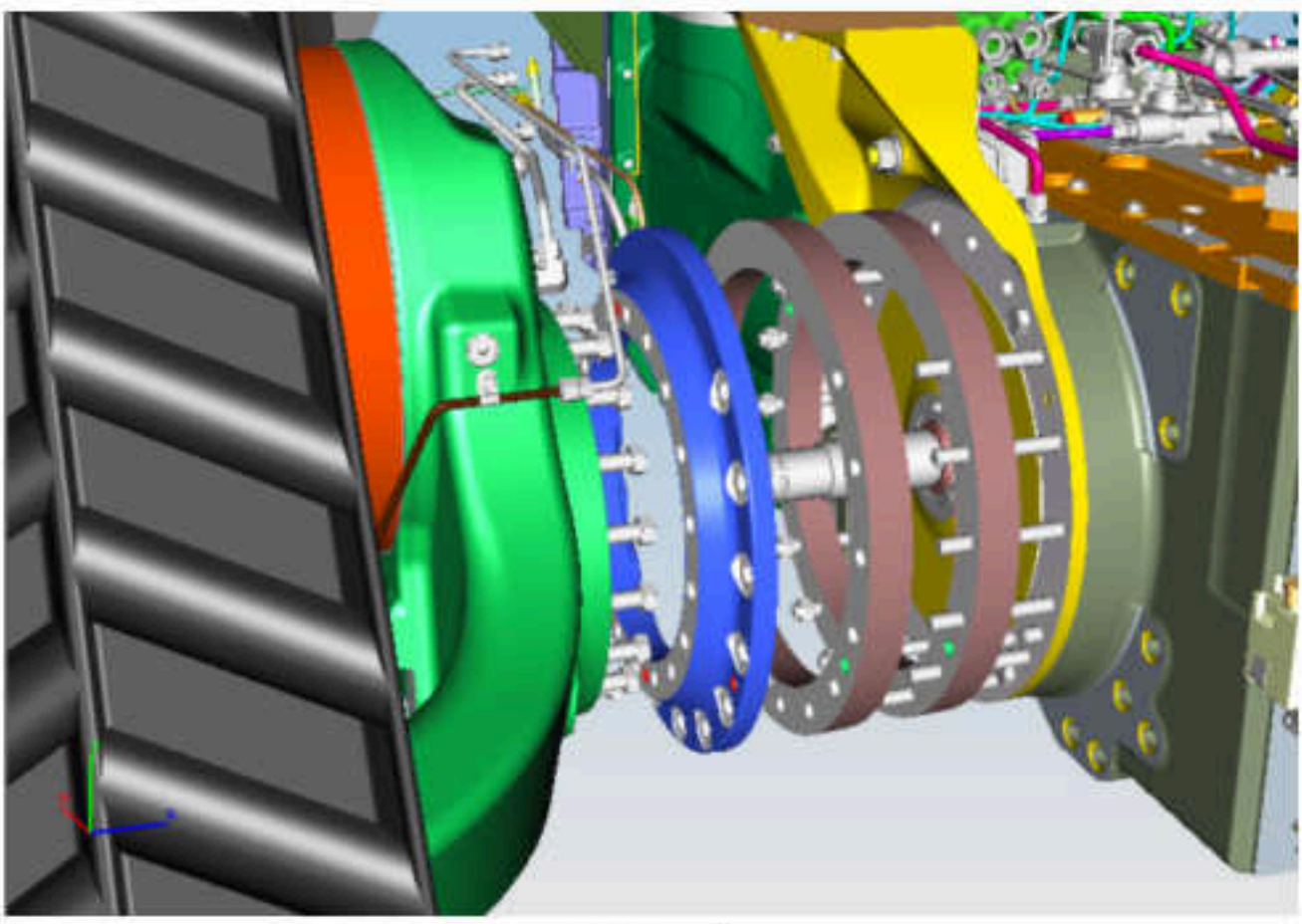
   A. Signal voltage reading not within range for tank fuel level. Replace the fuel tank level sender. Return unit to field operation.

   B. Signal voltage reading within range for tank fuel level. Erase the fault code. Return unit to field operation and monitor for continuing problems

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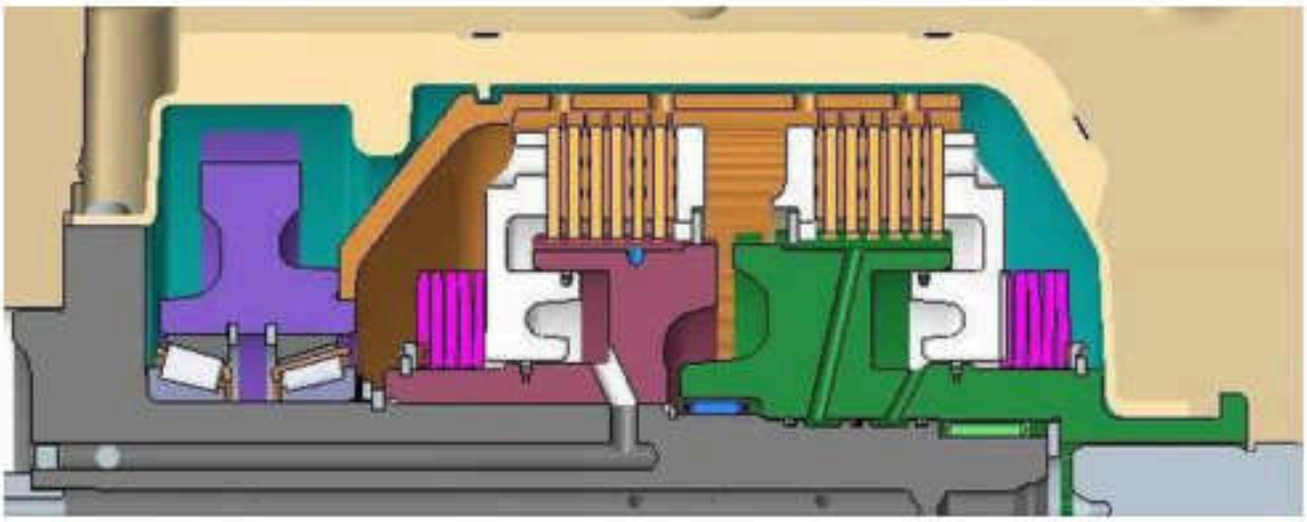
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RAIL1STR01838UA 11

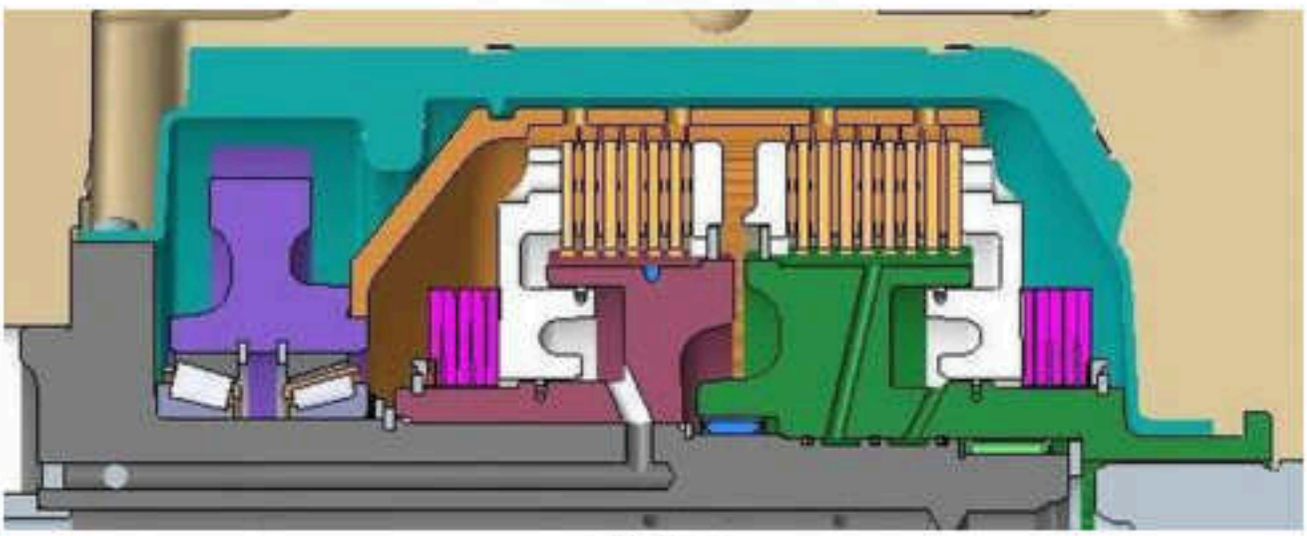
2032 mm (80 in) tread spacing

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Park brake 12 bolt front axle



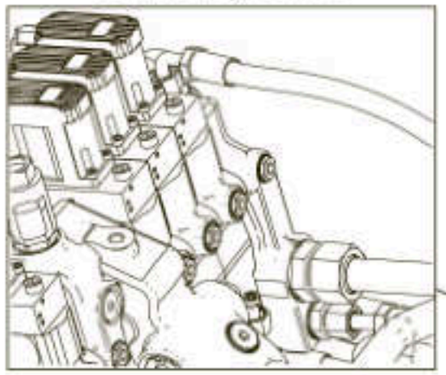
RAIL1STR01691TA 5

Park brake class 5.0 front axle

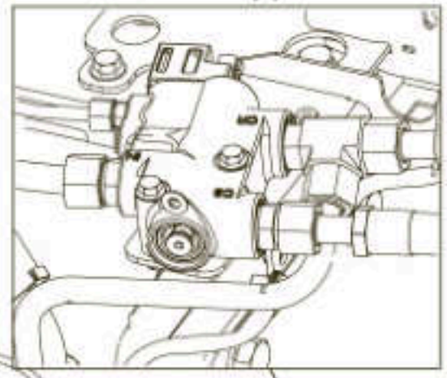
Model	T8.320	T8.350	T8.380	T8.410
PTO Hp	205	235	265	290
No. of friction plates	6			6
Friction plate	Standard			Heavy duty
Belleville spring	Standard			Standard
# of Belleville springs	5			5

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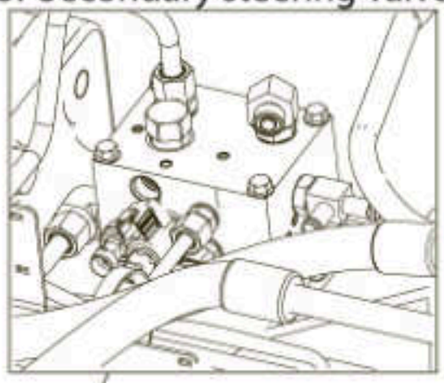
1. Priority valve



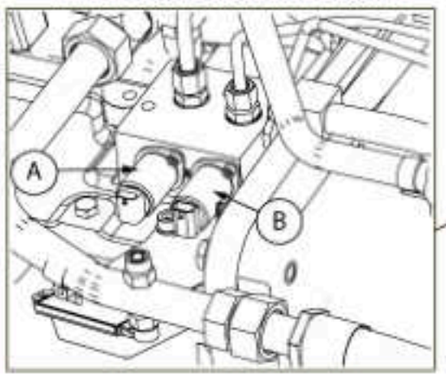
2. Oil cooler bypass valve

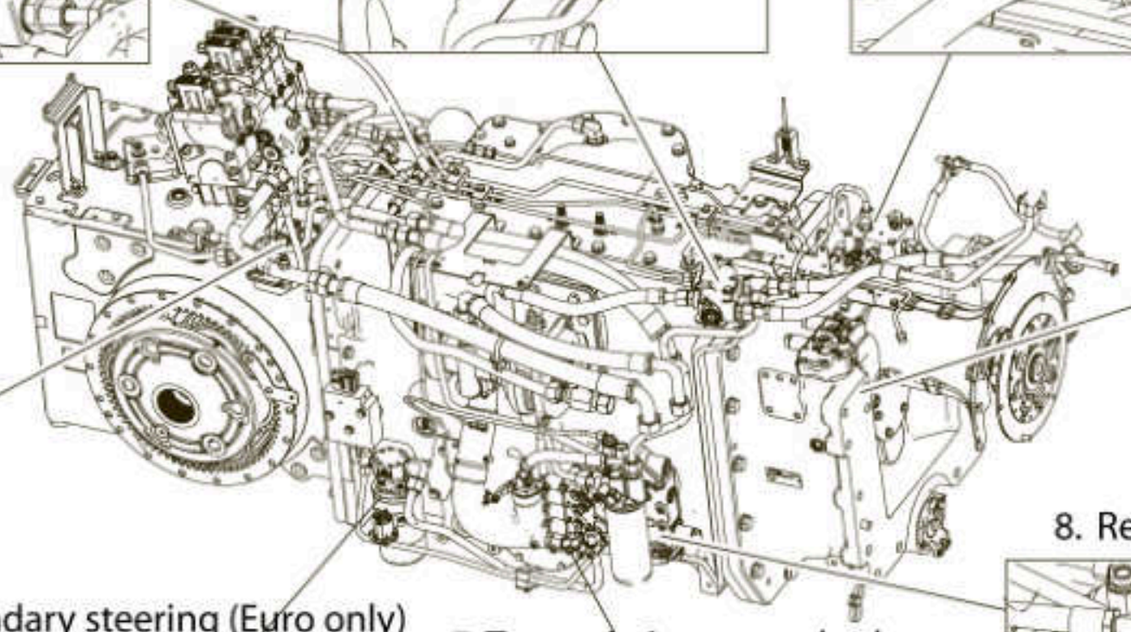


3. Secondary steering valve (Euro only)

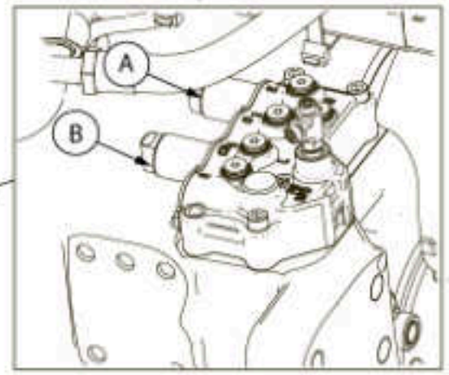


4. Rear PTO brake
MFD Differential lock

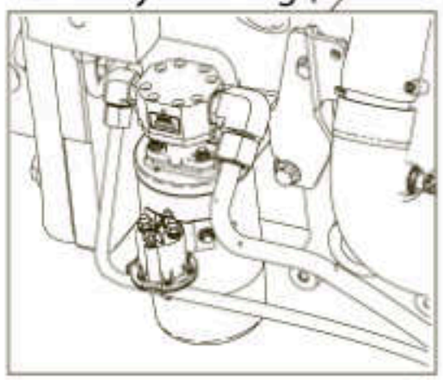




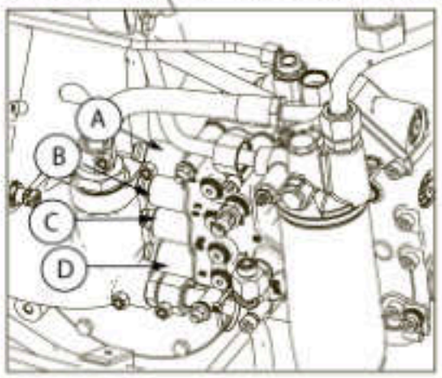
5. Forward/Reverse valve



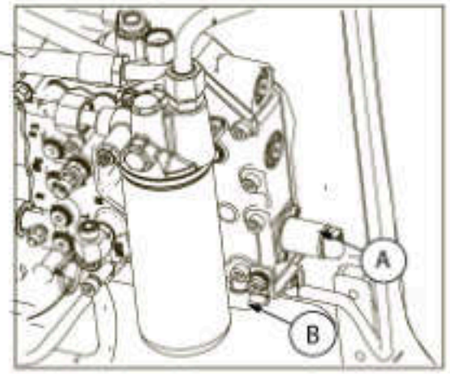
6. Secondary steering (Euro only)



7. Transmission control valve



8. Regulator valve



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